REMARKS/ARGUMENTS

Claims 1-15 and 18-21 are pending in the captioned application. Applicants have amended claims 2, 9, 19 and 20. Applicants respectfully request reconsideration and allowance of claims 1-15 and 18-21 in view of the following arguments.

Claims 1-15 and 18-20 are again rejected to as being unpatentable under 35 U.S.C. §103(a), over Wagner et al. (WO 2001/72458) in view of Bosman et al. (WO 1999/00670), Barner et al. (US 5986066), Badley et al. (US 6294391) and Nelson et al. (US 5955729). Applicants respectfully disagree.

Applicants have further amended the claims in view of the Examiner's response. In particular, the claims are amended to clearly state that the second form of binding occurs between the reactive groups and the non-tag part of the biomolecules.

Applicants reiterate that in Bosman et al., the His-tag is not used in its conventional way (i.e. binding to a metal chelate) but as an agent for covalent immobilization and/or covalent conjugation of proteins/peptides to a support or carrier, see for example claim 1 of Bosman et al. Thus, in Bosman et al., the tag on the biomolecule has the primary function of forming a covalent bond with groups on the support. To increase the probability of this binding, the tag may have the further function of also binding to tag-binding compounds on the support. Thus, the tags are

involved in both the covalent binding and the tag-specific binding.

In the present invention the solid support immobilization substrate is provided with tag binding sites and activated reactive groups. The specification teaches that the covalent coupling should be anywhere on the biomolecule but not on the tag. In the examples presented in the specification, the coupling is preferably done via activated carboxy acids. These give a stable amide binding with amines. In the case with the imidazol group in histidines, a labile coupling is obtained which is further reacted with amines which gives stable bonds or are hydrolyzed by water back to the acid. Therefore, it is implicitly taught that covalent coupling is not intended to the His-tag.

It is clear from the specification and the examples provided that the interaction of the biomolecules and the immobilization substrate includes both (1) the interaction of the tag on the biomolecule and the binding site for the tag from the immobilization substrate, as well as (2) the covalent bonding of the non-tag part of the biomolecules and the immobilization substrate. Applicants submit that this is neither taught nor suggested by Bosman or any of the references. As such, Applicants submit that the amended claims are not rendered obvious by the references separately or combined.

Applicants respectfully assert that the claims are in allowable form and earnestly solicit the allowance of claims 1-15 and 18-21.

Early and favorable consideration is respectfully requested.

Respectfully submitted,

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